

- Trip Generation Worksheets

Institute of Transportation Engineers (ITE) 8th Edition Land Use Code (LUC) 710 - General Office Building
--

Average Vehicle Trips Ends vs: 1000 Sq. Feet Gross Floor Area
Independent Variable (X): 288.7

AVERAGE WEEKDAY DAILY

$$\ln T = 0.77 \ln (X) + 3.65$$

$$\ln T = 0.77 \ln 288.7 + (3.65)$$

$$\ln T = 8.01$$

$$T = 3018.00$$

$$T = 3,018 \text{ vehicle trips}$$

with 50% (1,509 vpd) entering and 50% (1,509 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.80 \ln (X) + 1.55$$

$$\ln T = 0.80 \ln 288.7 + (1.55)$$

$$\ln T = 6.08$$

$$T = 438.04$$

$$T = 438 \text{ vehicle trips}$$

with 88% (385 vph) entering and 12% (53 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.12 * (X) + 78.81$$

$$T = 1.12 * 288.7 + (78.81)$$

$$T = 402.15$$

$$T = 402 \text{ vehicle trips}$$

with 17% (68 vph) entering and 83% (334 vph) exiting.

SATURDAY DAILY

$$T = 2.14 * (X) + 18.47$$

$$T = 2.14 * 288.7 + 18.47$$

$$T = 636.29$$

$$T = 636 \text{ vehicle trips}$$

with 50% (318 vpd) entering and 50% (318 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$$\ln T = 0.81 \ln (X) - 0.12$$

$$\ln T = 0.81 \ln 288.7 - (0.12)$$

$$\ln T = 4.47$$

$$T = 87.27$$

$$T = 87 \text{ vehicle trips}$$

with 54% (47 vph) entering and 46% (40 vph) exiting.

Institute of Transportation Engineers (ITE) 8th Edition
Land Use Code (LUC) 710 - General Office Building

Average Vehicle Trips Ends vs: 1000 Sq. Feet Gross Floor Area
Independent Variable (X): 225.7

AVERAGE WEEKDAY DAILY

$$\ln T = 0.77 \ln (X) + 3.65$$

$$\ln T = 0.77 \ln 225.7 + (3.65)$$

$$\ln T = 7.82$$

$$T = 2496.86$$

$$T = 2,496 \text{ vehicle trips}$$

with 50% (1,248 vpd) entering and 50% (1,248 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.80 \ln (X) + 1.55$$

$$\ln T = 0.80 \ln 225.7 + (1.55)$$

$$\ln T = 5.89$$

$$T = 359.73$$

$$T = 360 \text{ vehicle trips}$$

with 88% (317 vph) entering and 12% (43 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.12 * (X) + 78.81$$

$$T = 1.12 * 225.7 + (78.81)$$

$$T = 331.59$$

$$T = 332 \text{ vehicle trips}$$

with 17% (56 vph) entering and 83% (276 vph) exiting.

SATURDAY DAILY

$$T = 2.14 * (X) + 18.47$$

$$T = 2.14 * 225.7 + 18.47$$

$$T = 501.47$$

$$T = 502 \text{ vehicle trips}$$

with 50% (251 vpd) entering and 50% (251 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$$\ln T = 0.81 \ln (X) - 0.12$$

$$\ln T = 0.81 \ln 225.7 - (0.12)$$

$$\ln T = 4.27$$

$$T = 71.49$$

$$T = 71 \text{ vehicle trips}$$

with 54% (38 vph) entering and 46% (33 vph) exiting.

Institute of Transportation Engineers (ITE) 8th Edition Land Use Code (LUC) 710 - General Office Building
--

Average Vehicle Trips Ends vs: 1000 Sq. Feet Gross Floor Area
 Independent Variable (X): 287.7

AVERAGE WEEKDAY DAILY

$$\ln T = 0.77 \ln (X) + 3.65$$

$$\ln T = 0.77 \ln 287.7 + (3.65)$$

$$\ln T = 8.01$$

$$T = 3009.94$$

$$T = 3,010 \text{ vehicle trips}$$

with 50% (1,505 vpd) entering and 50% (1,505 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.80 \ln (X) + 1.55$$

$$\ln T = 0.80 \ln 287.7 + (1.55)$$

$$\ln T = 6.08$$

$$T = 436.83$$

$$T = 437 \text{ vehicle trips}$$

with 88% (385 vph) entering and 12% (52 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.12 * (X) + 78.81$$

$$T = 1.12 * 287.7 + (78.81)$$

$$T = 401.03$$

$$T = 401 \text{ vehicle trips}$$

with 17% (68 vph) entering and 83% (333 vph) exiting.

SATURDAY DAILY

$$T = 2.14 * (X) + 18.47$$

$$T = 2.14 * 287.7 + 18.47$$

$$T = 634.15$$

$$T = 634 \text{ vehicle trips}$$

with 50% (317 vpd) entering and 50% (317 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$$\ln T = 0.81 \ln (X) - 0.12$$

$$\ln T = 0.81 \ln 287.7 - (0.12)$$

$$\ln T = 4.47$$

$$T = 87.02$$

$$T = 87 \text{ vehicle trips}$$

with 54% (47 vph) entering and 46% (40 vph) exiting.

Institute of Transportation Engineers (ITE) 8th Edition Land Use Code (LUC) 710 - General Office Building
--

Average Vehicle Trips Ends vs: 1000 Sq. Feet Gross Floor Area
Independent Variable (X): 397.7

AVERAGE WEEKDAY DAILY

$$\ln T = 0.77 \ln (X) + 3.65$$

$$\ln T = 0.77 \ln 397.7 + (3.65)$$

$$\ln T = 8.26$$

$$T = 3862.18$$

$$T = 3,862 \text{ vehicle trips}$$

with 50% (1,931 vpd) entering and 50% (1,931 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.80 \ln (X) + 1.55$$

$$\ln T = 0.80 \ln 397.7 + (1.55)$$

$$\ln T = 6.34$$

$$T = 565.98$$

$$T = 566 \text{ vehicle trips}$$

with 88% (498 vph) entering and 12% (68 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.12 * (X) + 78.81$$

$$T = 1.12 * 397.7 + (78.81)$$

$$T = 524.23$$

$$T = 524 \text{ vehicle trips}$$

with 17% (89 vph) entering and 83% (435 vph) exiting.

SATURDAY DAILY

$$T = 2.14 * (X) + 18.47$$

$$T = 2.14 * 397.7 + 18.47$$

$$T = 869.55$$

$$T = 870 \text{ vehicle trips}$$

with 50% (435 vpd) entering and 50% (435 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$$\ln T = 0.81 \ln (X) - 0.12$$

$$\ln T = 0.81 \ln 397.7 - (0.12)$$

$$\ln T = 4.73$$

$$T = 113.12$$

$$T = 113 \text{ vehicle trips}$$

with 54% (61 vph) entering and 46% (52 vph) exiting.

Institute of Transportation Engineers (ITE) 8th Edition Land Use Code (LUC) 760 - Research and Development Center
--

Average Vehicle Trips Ends vs: 1,000 sf gross floor area
Independent Variable (X): 225.7

AVERAGE WEEKDAY DAILY

$$\ln T = 0.82 \ln (X) + 3.14$$

$$\ln T = 0.82 \ln 225.7 + (3.14)$$

$$\ln T = 7.58$$

$$T = 1965.99$$

T = 1,966 vehicle trips

with 50% (983 vpd) entering and 50% (983 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.86 \ln (X) + 0.93$$

$$\ln T = 0.86 \ln 225.7 + (0.93)$$

$$\ln T = 5.59$$

$$T = 267.87$$

T = 268 vehicle trips

with 83% (222 vph) entering and 17% (46 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.82 \ln (X) + 1.09$$

$$\ln T = 0.82 \ln 225.7 + (1.09)$$

$$\ln T = 5.53$$

$$T = 253.09$$

T = 253 vehicle trips

with 15% (38 vph) entering and 85% (215 vph) exiting.

SATURDAY DAILY

$$T = 1.27 * (X) + 104.92$$

$$T = 1.27 * 225.7 + 104.92$$

$$T = 391.56$$

T = 392 vehicle trips

with 50% (196 vpd) entering and 50% (196 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$$T = 0.15 * (X) + 12.75$$

$$T = 0.15 * 225.7 + 12.75$$

$$T = 46.61$$

T = 46 vehicle trips

with 50% (23 vpd) entering and 50% (23 vpd) exiting.

Institute of Transportation Engineers (ITE) 8th Edition Land Use Code (LUC) 760 - Research and Development Center
--

Average Vehicle Trips Ends vs: 1,000 sf gross floor area
Independent Variable (X): 287.7

AVERAGE WEEKDAY DAILY

$$\ln T = 0.82 \ln (X) + 3.14$$

$$\ln T = 0.82 \ln 287.7 + (3.14)$$

$$\ln T = 7.78$$

$$T = 2398.92$$

T = 2,398 vehicle trips

with 50% (1,199 vpd) entering and 50% (1,199 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.86 \ln (X) + 0.93$$

$$\ln T = 0.86 \ln 287.7 + (0.93)$$

$$\ln T = 5.80$$

$$T = 330.05$$

T = 330 vehicle trips

with 83% (274 vph) entering and 17% (56 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.82 \ln (X) + 1.09$$

$$\ln T = 0.82 \ln 287.7 + (1.09)$$

$$\ln T = 5.73$$

$$T = 308.82$$

T = 309 vehicle trips

with 15% (46 vph) entering and 85% (263 vph) exiting.

SATURDAY DAILY

$$T = 1.27 * (X) + 104.92$$

$$T = 1.27 * 287.7 + 104.92$$

$$T = 470.30$$

T = 470 vehicle trips

with 50% (235 vpd) entering and 50% (235 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$$T = 0.15 * (X) + 12.75$$

$$T = 0.15 * 287.7 + 12.75$$

$$T = 55.91$$

T = 56 vehicle trips

with 50% (28 vpd) entering and 50% (28 vpd) exiting.

Institute of Transportation Engineers (ITE) 8th Edition Land Use Code (LUC) 760 - Research and Development Center
--

Average Vehicle Trips Ends vs: 1,000 sf gross floor area
Independent Variable (X): 397.7

AVERAGE WEEKDAY DAILY

$$\ln T = 0.82 \ln (X) + 3.14$$

$$\ln T = 0.82 \ln 397.7 + (3.14)$$

$$\ln T = 8.05$$

$$T = 3128.39$$

$$T = 3,128 \text{ vehicle trips}$$

with 50% (1,564 vpd) entering and 50% (1,564 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.86 \ln (X) + 0.93$$

$$\ln T = 0.86 \ln 397.7 + (0.93)$$

$$\ln T = 6.08$$

$$T = 436.03$$

$$T = 436 \text{ vehicle trips}$$

with 83% (362 vph) entering and 17% (74 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.82 \ln (X) + 1.09$$

$$\ln T = 0.82 \ln 397.7 + (1.09)$$

$$\ln T = 6.00$$

$$T = 402.73$$

$$T = 403 \text{ vehicle trips}$$

with 15% (60 vph) entering and 85% (343 vph) exiting.

SATURDAY DAILY

$$T = 1.27 * (X) + 104.92$$

$$T = 1.27 * 397.7 + 104.92$$

$$T = 610.00$$

$$T = 610 \text{ vehicle trips}$$

with 50% (305 vpd) entering and 50% (305 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$$T = 0.15 * (X) + 12.75$$

$$T = 0.15 * 397.7 + 12.75$$

$$T = 72.41$$

$$T = 72 \text{ vehicle trips}$$

with 50% (36 vpd) entering and 50% (36 vpd) exiting.